



# POLLUTION PREVENTION & THE BOTTOM LINE

SEPTEMBER 1997

WORDS & WISDOM FROM THE NEW ENGLAND ENVIRONMENTAL ASSISTANCE TEAM

## MEET OUR PARTNERS FOR CHANGE

EPA has announced its first three participants in the agency's *Partners for Change* program. The program rewards New England businesses and municipalities for implementing responsible environmental practices. Meet our *Partners*:

Bennington, N.H.-based Monadnock Paper Mills implemented waste and water use reduction projects, and an employee education program. In its waste reduction program, Monadnock runs a tracking system that measures the raw materials that are "lost" from the papermaking process, which has resulted in a steady decline of lost materials since 1991. A similar program has been set up to track and reduce water usage. As part of Monadnock's orientation program, all new employees receive information on the company's recycling program, waste minimization efforts, path of waste treatment and disposal, and a tour of the wastewater treatment plant and waste collection areas. In addition, Monadnock's environmental department regularly reports on the progress of pollution prevention efforts in the company newsletter.

Tri-Star Technologies Company, Inc. -- a printed circuit board manufacturer in Methuen, Mass. -- has programs to conserve energy and water, recycle spent material, minimize the generation of hazardous waste, and reduce the use of chemicals. The company changed the way it manufactures printed wire circuit boards and realized an 86 percent reduction in the use of volatile organic compounds (VOCs). The move also saved the company nearly \$500,000 in annual operating costs. As a result of measures undertaken to improve energy efficiency, Tri-Star reduced its annual carbon dioxide emissions by more than 181,000 pounds while saving \$13,352 in energy costs.

Recycline, Inc. of Cambridge, Mass. promotes recycling both in and outside its company walls. Recycline manufacturers and sells toothbrushes with handles made of 85 percent recycled plastic and packages them in reusable containers. The company encourages consumers to return the used toothbrush by supplying postage-paid envelopes to their retailers. Through a comprehensive in-house program, the company also recycles

nearly 70 percent of all its trash.

*Partners for Change* is open to any business, municipality or organized group in New England. To be recognized as a partner, a facility must implement a project or activity that results in a long-term environmentally beneficial change to its daily operations. Such efforts can include waste reduction practices, recycling programs or other efforts that help green the work place. In return for joining the program, *Partners* receive a certificate and window decal, are featured in a business-to-business directory, publicity from EPA and the right to market themselves as a *Partner for Change*. To sign up for *Partners for Change* or for more information about the program call

1.800.906.3328.

Request the "environmental pocketbook." The pocketbook includes

an application along with useful tips on recycling, energy efficiency and waste reduction, as well as phone, e-mail and worldwide web listings of EPA and other resources.

WE HELP PROTECT THE NEW ENGLAND ENVIRONMENT.



for Change

## 1998 DEADLINE FOR UNDERGROUND STORAGE TANKS

EPA will not extend the December 1998 deadline for upgrading, replacing or closing underground storage tanks. Under regulations that EPA issued in 1988, owners and operators of underground storage tanks (USTs) storing petroleum and hazardous substances have until December 22, 1998 to change USTs that do not meet federal requirements for protection against spills, overfills, and corrosion. These requirements are a key element in state and EPA efforts to prevent groundwater contamination. EPA and states will continue to work with UST owners and operators to encourage compliance in advance of the 1998 deadline. For more information call EPA's UST help line at 1.800.424.9346.

# MARK YOUR CALENDAR

## SEPTEMBER 17 & 18

### TRI Reporting Workshop

8:30 a.m. to 4:00 p.m.

Boston, MA

This two-day workshop will cover the basic reporting requirements under the Section 313 of the Emergency Planning and Community-Right-to-Know Act (EPCRA). The Act requires facilities to report releases of chemicals covered by the Toxics Release Inventory (TRI). Seven new industry groups are now required to file reports. Previously, only manufacturing facilities and federal facilities were required to report. This workshop will introduce the reporting requirements to the staffs of the recently added industry groups. These newly added industry groups are: electric utilities; commercial hazardous waste treatment facilities; chemical wholesalers; solvent recovery services; petroleum bulk terminals; metal mining; and, coal mining. Sponsored by EPA. For more information call the EPCRA Information Hotline at 800.535.0202.

## SEPTEMBER 18

### Creating a Financial Strategy for Your Environmental Company

8:30 a.m. to 1:00 p.m.

Bentley College

Waltham, Mass.

Sponsored by EPA and the Massachusetts Strategic Environmental Partnership. Representatives from the environmental technology industry, private financial firms, and state and federal agencies will address topics such as: financial assistance programs for technology development and verification; financing options for the small environmental enterprise; and, private sector case studies and experiences. Contact EPA's Center for Environmental Industry & Technology in New England at 1.800.575.CEIT (1.800.575.2348).

## SEPTEMBER 23

### Marketing Opportunities for Water and Wastewater Technology

8:30 to 1:00 p.m.

University of Connecticut Law School

Hartford, Conn.

Sponsored by EPA and the Connecticut Environmental Entrepreneurial Center. Attendees will learn: where the market for water and wastewater technology is headed; what new technology will impact the market; what industry wants from technology developers and vendors; and, how other companies have successfully commercialized their products. Contact EPA's Center for Environmental Industry & Technology in New England at 1.800.575.CEIT.

## SEPTEMBER 30

### Metal Finishing Workshop & Second Annual Meeting of AESF/Merrimack Chapter

8:30 a.m. to 4:00 p.m.

Sheraton Portsmouth Conference Center

Portsmouth, N.H.

Sponsored by the Merrimack Chapter of the American Electroplaters and Surface Finishers Society, this workshop will have sessions on new technologies for the metal plating and finishing industries and an update on regulations. Co-sponsored by EPA, the N.H. Department of Environmental Services, the N.H. Pollution Prevention Partnership and the University of N.H. Registration fee - \$30. Contact Karina Drumheller, the University of NH, at 603.862.4344.

## OCTOBER 29

### Environmental Regulations: Job & Classroom Resources

8:30 a.m. to 3:00 p.m.

Sheraton Hotel

Lowell, Mass.

This workshop is geared towards professors at community colleges with two-year environmental technology programs. The workshop will address how to access information from EPA, common environmental problems, and new directions at EPA. Co-sponsored by EPA and the New England Partnership for Environmental Technology Education. For more information contact Joan Jouzaitis at EPA at 617.565.9009.

## NOVEMBER 17

### Trade Show - New & Innovative Technologies for Treating Stormwater Runoff

8:00 a.m. to 3:30 p.m.

Hartford, Conn.

Sponsored by EPA, USDA Natural Resources Conservation Service and the Conn. Department of Environmental Protection. Presentations and product displays by manufacturers' representatives with an opportunity for the audience to view new systems, talk with vendors, and get information on product cost and performance. Registration fee - \$30. Contact EPA's Center for Environmental Industry & Technology in New England at 1.800.575.CEIT (1.800.575.2348).

## NOVEMBER 19

### Trade Show - New & Innovative Technologies for Treating Stormwater Runoff

8:00 a.m. to 3:30 p.m.

Portland, Maine

Sponsored by EPA, USDA Natural Resources Conservation Service and the Maine Department of Environmental Protection. See description for November 17.

# NATIONAL POLLUTION PREVENTION WEEK IS SEPTEMBER 15 - 21

Protecting the environment and improving a facility's bottom line go hand-in-hand. Taking a proactive approach to environmental management by preventing rather than controlling pollution enables you to lower costs, reduce liability risks and improve operating efficiency. Here are some tips on what you can do to minimize waste and improve your facility's operating efficiency.

General office tips: shipping/packing and office materials.

- Choose suppliers who provide packaging that can be recycled or packaging that contains recycled material.
- Reuse packing "peanuts" and other shipping & packing materials.
- Shred non-recyclable paper items and use for packing.
- Join with other small businesses for cooperative hauling of trash and recyclables to share disposal/recycling costs.
- Contact recycling companies about possible free pickup of recyclables on a regular schedule.
- Make double-sided copies.
- Reduce the number of paper copies of receipts.
- Make recycling easy for staff and customers. Provide bins for trash, office paper, newspaper, and aluminum cans.

(From the web site Enviro\$en\$e: <http://es.inel.gov.new/business/sbdc26.htm>)

For printers: good operating practices for ink inventory control to reduce ink waste generated from color changes, press cleaning, or poor ink management.

- Use a standard ink sequence for process colors. Schedule runs from lighter to darker colors to decrease the need to change inks and the amount of cleaning necessary.
- Scrape as much ink as possible from containers when disposing of or recycling ink containers.
- Put new stock on shelves behind older stock.
- Monitor ink inventory closely so that inks are used before their expiration dates.
- Return unused excess inks to the manufacturer if you can.
- Counsel customers about the environmental impacts associated with particular colors, paper, or printing method choices.
- Ensure that your printing jobs represent the actual cost of doing business and disposing of hazardous and other wastes. Factor waste disposal costs into the price of your products, and let the market do the rest.

(From *Fit to Print: an Environmental Compliance and Pollution Prevention Manual for New England Lithographers*, 1997, 92 pp., free. Call EPA's NEEATeam at 1.800.NEEAT for a copy.)

For metal plater and finishers: good operating practices for spray and soak aqueous systems.

- Maintain the agitation system (spray nozzles for spraying systems) to allow for mechanical energy to work with the cleaning chemicals.
- Use liquid or pre-dissolved chemicals instead of powders or crystals. Solids such as powders or crystals tend to form "cakes" that do not dissolve and form sludge at the bottom of the tank.
- Analyze and maintain the chemical content of the cleaner within the specified window of concentration.
- Maintain thermal energy, by optimizing the temperature, but keep temperature as low as possible without affecting work quality, to conserve energy.
- Regular inspections of pumps, valves, sprays recovery equipment, heating, and agitation systems can detect small problems before they become big ones.

(From *P2 Concepts and Practices for Metal Plating and Finishing*. Call EPA's NEEATeam at 800.90NEEAT for more information.)

For wood coaters and finishers: waste reduction, recycling and good operating practices for coating operations.

- Re-examine the need for coating, as well as available alternatives.
- Use plastic coatings instead of paint.
- Use high-solids coating formulations.
- Use low-VOC powder coatings.
- Use water-based coating formulations.
- Pre-inspect parts to avoid coating obvious rejects.
- Control bake oven temperature.
- Recycle overspray.
- Reduce overspray. To reduce overspray:
  - maintain 50 percent overlap between spray patterns;
  - maintain 6- to 8-inch distance between spray gun and work piece;
  - maintain gun speed of about 250 feet per minute;
  - hold gun perpendicular to surface;
  - properly train operators;
  - avoid excess air pressure for coating atomization; and,
  - make sure spray gun air supply is free of water, oil, and dirt.

(From the web site Enviro\$en\$e: <http://es.inel.gov.new/business/sbdc50.htm>)

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*Pollution Prevention & the Bottom Line* is now available on the 'net. The address is <http://www.epa.gov/region01/steward/necat/>

To be added to the *Pollution Prevention & the Bottom Line* mailing list or to notify us of a change of address please contact the NEEATeam at the phone/fax numbers or address listed above or send an e-mail message to:

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